Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drain 22nd and 23rd main road and Surrounding Area of Judicial layout in ward no. 04, Yelahanka Uphanagara

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	**Removing and refixing** stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33,KPWD SR 2018-19)								
	Basic rate	105.00							
	Area Weightage 6%	6.30							
	Total	**111.30**							
	For Drain Desilt	**Sqm**							
	Ward 4								
	Judicial Layout								
	29th cross		2	218.00	1.65		719.40		
	28th cross		2	200.00	1.65		660.00		
	27th B cross		2	112.00	1.65		369.60		
	23rd main		2	130.00	1.65		429.00		
	23rd cross		2	200.00	1.65		660.00		
	26th cross		2	58.00	1.65		191.40		
	25th B cross		2	179.00	1.65		590.70		
	23rd cross		2	78.00	1.65		257.40		
							3877.50		
	Consider 20%						775.50		
							3102.00	**111.30**	**345252.60**
2	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(I No-19.1, P No-143), 10km lead								
	Basic rate	130.00							
	Area Weightage 6%	7.80							
	Loading and Unloding &	82.60							
	Total	**220.40**							
		Cum							
	For Drain Desilt								
	Ward 4								
	Judicial Layout								
	29th cross		2	218.00	0.45	0.30	58.86		
	28th cross		2	200.00	0.45	0.30	54.00		
	27th B cross		2	112.00	0.45	0.30	30.24		
	23rd main		2	130.00	0.45	0.30	35.10		
	23rd cross		2	200.00	0.45	0.30	54.00		
	26th cross		2	58.00	0.45	0.30	15.66		
	25th B cross		2	179.00	0.45	0.30	48.33		
	23rd cross		2	78.00	0.45	0.30	21.06		
	Culvert		2	6.50	1.50	1.10	21.45		
	RCC Drain								
	Cross Road 1		2	90.00	1.10	1.10	217.80		
	Cross Road 2		2	100.00	1.10	1.10	242.00		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							798.50	**220.40**	**175989.40**
3	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	Basic rate	5115.00							
	Area Weightage 6%	306.90							
	Total	**5421.90**							
		Cum							
	Ward 4								
	Judicial Layout								
	RCC Drain								
	Cross Road 1		2	90.00	1.10	0.15	29.70		
	Cross Road 2		2	100.00	1.10	0.15	33.00		
	Culvert		2	6.50	1.50	0.15	2.93		
							65.63	**5421.90**	**355812.19**
4	Providing and laying plain/reinforced cement concrete for side drains using **M20 nominal mix concrete with OPC at 300 kgs.** With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	6670.00							
	Area Weightage 6%	400.20							
	Total	**7070.20**							
		Cum							
	Ward 4								
	Judicial Layout								
	RCC Drain								
	Raft								
	Cross Road 1		2	90.00	0.90	0.15	24.30		
	Cross Road 2		2	100.00	0.90	0.15	27.00		
	Wall								
	Cross Road 1		4	90.00	0.15	0.60	32.40		
	Cross Road 2		4	100.00	0.15	0.60	36.00		
	Culvert		2	6.50	1.20	0.20	3.12		
	Culvert		4	6.50	0.23	0.60	3.59		
							126.41	**7070.20**	**893729.84**
5	KSRRB - M2300-14: **Providing TMT steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	69804.00							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Area Weightage 6%	4188.24							
	Total	73992.24							
		Tn							
	Ward 4								
	Judicial Layout								
	RCC Drain								
	For Drain 60kg/cum			126.41	0.06		7.58		
	For Culvert 90kg/cum			6.71	0.09		0.60		
							8.19	73992.24	605863.26
6	Providing and Fixing **pre cast covering Slab 100mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	2337.00							
		Sqm							
	Ward 4								
	Judicial Layout								
	RCC Drain								
	Cross Road 1		2	90.00	0.90		162.00		
	Cross Road 2		2	100.00	0.90		180.00		
							342.00	2337.00	799254.00
7	Providing and fixing **RCC precast cover slab of 250mm thick** for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Data rate	5418.00							
		Sqm							
	Ward 4								
	Judicial Layout								
	Culvert		2	6.50	1.20		15.60		
							15.60	5418.00	84,520.80
8	**Providing granite slabs** of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. 7.5 cms thick (I No-5.31.1,P No-27,KPWD SR 2018-19)								
	Basic rate	700.00							
	Area Weightage 6%	42.00							
	Total	742.00							
		Sqm							
	Missing slabs from item no. 1, 30%						1163.25		
							1163.25	742.00	863131.50
9	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143,KPWD SR 2018-19), 10kms lead								
	Basic rate	41.00							
	Area Weightage 6%	2.46							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Loading and Unloding & Lead	25.60							
	Total	69.06							
		Cum							
	Ward 4								
	Judicial Layout								
	29th cross		2	218.00	1.00	0.20	87.20		
	28th cross		2	200.00	1.00	0.20	80.00		
	27th B cross		2	112.00	1.00	0.20	44.80		
	23rd main		2	130.00	1.00	0.20	52.00		
	23rd cross		2	200.00	1.00	0.20	80.00		
	26th cross		2	58.00	1.00	0.20	23.20		
	25th B cross		2	179.00	1.00	0.20	71.60		
	23rd cross		2	78.00	1.00	0.20	31.20		
							470.00	69.06	32,458.20
10	**Construction of granular sub-base Grading-V** as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	Basic rate	1882.00							
	Area Weightage 6%	112.92							
	Total	1994.92							
		Cum							
	Ward 4								
	Judicial Layout								
	29th cross		2	218.00	1.00	0.15	65.40		
	28th cross		2	200.00	1.00	0.15	60.00		
	27th B cross		2	112.00	1.00	0.15	33.60		
	23rd main		2	130.00	1.00	0.15	39.00		
	23rd cross		2	200.00	1.00	0.15	60.00		
	26th cross		2	58.00	1.00	0.15	17.40		
	25th B cross		2	179.00	1.00	0.15	53.70		
	23rd cross		2	78.00	1.00	0.15	23.40		
							352.50	1994.92	703209.30
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Basic rate	1888.00							
	Area Weightage 6%	113.28							
	Total	2001.28							
		Cum							
	Ward 4								
	Judicial Layout								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	29th cross		2	218.00	1.00	0.23	100.28		
	28th cross		2	200.00	1.00	0.23	92.00		
	27th B cross		2	112.00	1.00	0.23	51.52		
	23rd main		2	130.00	1.00	0.23	59.80		
	23rd cross		2	200.00	1.00	0.23	92.00		
	26th cross		2	58.00	1.00	0.23	26.68		
	25th B cross		2	179.00	1.00	0.23	82.34		
	23rd cross		2	78.00	1.00	0.23	35.88		
							540.50	**2001.28**	**1081691.84**
12	KSRRB M500-6. Providing and **applying primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6), issue rate dated 20-05-2020								
	Basic rate	25.00							
	Area Weightage 6%	1.50							
	Total	**26.50**							
		Sqm							
	Ward 4								
	Judicial Layout								
	29th cross		2	218.00	1.00		436.00		
	28th cross		2	200.00	1.00		400.00		
	27th B cross		2	112.00	1.00		224.00		
	23rd main		2	130.00	1.00		260.00		
	23rd cross		2	200.00	1.00		400.00		
	26th cross		2	58.00	1.00		116.00		
	25th B cross		2	179.00	1.00		358.00		
	23rd cross		2	78.00	1.00		156.00		
							2350.00	**26.50**	**62,275.00**
13	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7) issue rate dated 20-05-2020								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Total	**12.72**							
		Sqm							
	Ward 4								
	Judicial Layout								
	29th cross		1	218.00	6.20		1351.60		
	28th cross		1	200.00	6.00		1200.00		
	27th B cross		1	112.00	7.00		784.00		
	23rd main		1	130.00	5.80		754.00		
	23rd cross		1	200.00	6.50		1300.00		
	26th cross		1	58.00	5.80		336.40		
	25th B cross		1	179.00	5.60		1002.40		
	23rd cross		1	78.00	5.70		444.60		
							7173.00	**12.72**	**91,240.56**

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
14	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6), issue rate dated 20-05-2020								
	Basic rate	5403.00							
	Area Weightage 6%	324.18							
	Total	**5727.18**							
		Cum							
	Ward 4								
	Judicial Layout								
	29th cross		2	218.00	1.00	0.05	21.80		
	28th cross		2	200.00	1.00	0.05	20.00		
	27th B cross		2	112.00	1.00	0.05	11.20		
	23rd main		2	130.00	1.00	0.05	13.00		
	23rd cross		2	200.00	1.00	0.05	20.00		
	26th cross		2	58.00	1.00	0.05	5.80		
	25th B cross		2	179.00	1.00	0.05	17.90		
	23rd cross		2	78.00	1.00	0.05	7.80		
							117.50	**5727.18**	**672943.65**
15	Providing and laying **bituminous concrete 40mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12), issue rate dated 20-05-2020								
	Basic rate	6379.00							
	Area Weightage 6%	382.74							
	Total	**6761.74**							
		Cum							
	Ward 4								
	Judicial Layout								
	29th cross		1	218.00	6.20	0.04	54.06		
	28th cross		1	200.00	6.00	0.04	48.00		
	27th B cross		1	112.00	7.00	0.04	31.36		
	23rd main		1	130.00	5.80	0.04	30.16		
	23rd cross		1	200.00	6.50	0.04	52.00		
	26th cross		1	58.00	5.80	0.04	13.46		
	25th B cross		1	179.00	5.60	0.04	40.10		
	23rd cross		1	78.00	5.70	0.04	17.78		
							286.92	**6761.74**	**1940078.44**

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
16	KSRRB M800-13.**Road Marking** with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 6%	25.74							
	Total	**454.74**							
		Sqm							
	Ward 4								
	Judicial Layout								
	29th cross		2.5	218.00	0.10		54.50		
	28th cross		2.5	200.00	0.10		50.00		
	27th B cross		2.5	112.00	0.10		28.00		
	23rd main		2.5	130.00	0.10		32.50		
	23rd cross		2.5	200.00	0.10		50.00		
	26th cross		2.5	58.00	0.10		14.50		
	25th B cross		2.5	179.00	0.10		44.75		
	23rd cross		2.5	78.00	0.10		19.50		
							293.75	**454.74**	**133579.88**
								Total Construction Cost	**8841030.45**
								Towards GST 12%	**1060923.65**
								PMC Charges 1%	**98,000.00**
								Sub Total	**9999954.11**
								Miscellaneous & Rounding Off	**45.89**
								Total	**10000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 20-05-2020 and Data Rates

Ramanagaadi

Assistant Engineer
Ward 04
BBMP Bangalore

Asst. Executive Engineer
Yelahanka New Town Sub Division
BBMP Bangalore

Executive Engineer
Yelahanka Division
BBMP Bangalore

Administrative Sanction for Rs. ....100.00 lakhs
.....
.....
is accorded under head .....14th Finance
.....P-3296..... .....
.....
Registered as CE No. .....12..... Subject
to conditions contained in enclosed memo
No. BBMP/EE/YNK-D/A.S/12/20-21 Dt. 29/7/2020

Executive Engineer

Technical Sanction
Accorded for RS100 Walls
Head of A/C P3296...
CER NO: 52.... Dt: 29-07-2020

TA | CE (YNK)

Judicial layout

29th cross rd
L-218m

Apollo Pharmacy
ಅಪೋಲೋ
ಫಾರ್ಮಸಿ

SKLN INDANE
SERVICE

7th Cross

10th B Cross

28th cross rd
L-200m

14th Main rd

27th B cross rd
L-112m

Sangolli Rayanna Park
ಸಂಗೊಳ್ಳಿ
ರಾಯಣ್ಣ...
Temporarily closed

22nd Cross rd

25th Main rd

24th Main rd

Judicial layout
Letter Box

23rd Main rd
L-130m

22nd Main rd

21st Main rd

27th cross rd

19th Main rd

Maple Bear
Canadian Pre-school

27th Cross Rd

26th Cross Rd

25th Cross Rd

26th cross rd
L-58m

25th cross rd

19th Main rd

18th Main rd

20th Main rd

24th cross rd

23rd cross rd
L-78m

Venkateshwara
Food Grains

71316
Hospitality

Ramalingaeerah

22nd cross rd

Temporarily

22nd Cross Rd

ASPHALT ROAD

CLIENT: BRUHAT BANGALORE MAHANAGARA PALIKE	CONSULTANT:- Silicon Consulting Engineers #S1317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR BANGALORE 560 091 E-mail siliconcivilengineers@gmail.com	Assitante Engineer	Assitante Executive Engineer	Executive Engineer	Improvements to roads and drain 22nd and 23rd main road and Surrounding Area of Judicial layout in ward no. 04, Yelahanka Uphanagara	Date Dwg no: Rev: R0